Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

1. – 44. (Cancelled)

45. (New) A substantially pure consecutive and anti-angiogenic polypeptide, comprising the central region of human histidine rich glycoprotein (HRGP) corresponding to SEQ.ID.NO:2.

46. (New) The polypeptide of claim 45, consisting of the central region of human histidine rich glycoprotein (HRGP) corresponding to SEQ.ID.NO:2.

47. (New) A substantially pure consecutive and anti-angiogenic polypeptide, consisting of a subfragment of the central region of human HRGP (SEQ.ID.NO:2).

48. (New) The polypeptide of claim 47, said subfragment corresponding to region 330-364 (SEQ.ID.NO:1) of mature human HRGP.

49. (New) The polypeptide of claim 47, said subfragment having an amino acid length of between 3 and 35 amino acids.

50. (New) The polypeptide of claim 49, having an amino acid length selected from the group consisting of between 3 and 25 amino acids, 3 and 20 amino acids, 3 and 15 amino acids, 3 and 10 amino acids, and 3 and 8 amino acids.

51. (New) The polypeptide of claim 47, said subfragment corresponding to SEQ.ID.NO:18.

52. (New) The polypeptide of claim 47, said subfragment corresponding to SEQ.ID.NO:17.

53. (New) The polypeptide of claim 47, said subfragment corresponding to SEQ.ID.NO:16.

54. (New) The polypeptide of claim 47, said subfragment corresponding to SEQ.ID.NO:22.

55. (New) The polypeptide of claim 47, said subfragment corresponding to SEQ.ID.NO:21.

56. (New) The polypeptide of claim 47, said subfragment corresponding to SEQ.ID.NO:24.

57. (New) The polypeptide of claim 47, said subfragment corresponding to SEQ.ID.NO:23.

58. (New) The polypeptide of claim 47, said subfragment corresponding to SEQ.ID.NO:26.

59. (New) The polypeptide of claim 47, said subfragment corresponding to SEQ.ID.NO:25.

60. (New) The polypeptide of claim 47, said subfragment corresponding to SEQ.ID.NO:28.

61. (New) The polypeptide of claim 47, said subfragment corresponding to SEQ.ID.NO:27.

62. (New) The polypeptide of claim 47, wherein said polypeptide is isolated from human HRGP.

63. (New) The polypeptide of claim 47, wherein said polypeptide is isolated from proteolytically processed human HRGP purified from plasma.

64. (New) The polypeptide of claim 47, wherein said polypeptide is recombinantly produced or isolated from recombinantly produced human HRGP.

65. (New) The polypeptide of claim 47, wherein said polypeptide is synthetically produced.

66. (New) The polypeptide of claims 47, wherein said polypeptide does not promote angiogenesis or does not bind to thrombospondin.

67. (New) A pharmaceutical composition comprising an effective amount of the polypeptide of claim 47.

68. (New) The pharmaceutical composition of claim 67, further comprising a pharmaceutically acceptable carrier.

69. (New) The pharmaceutical composition of claim 67, further comprising an anti-angiogenic agent.

70. (New) The pharmaceutical composition of claim 69, wherein said anti-angiogenic agent is selected from the group consisting of angiostatin, thrombostatin, endostatin, interferon-α, interferon-inducible factor 10, and platelet factor 4.

71. (New) The pharmaceutical composition of claim 67, further comprising an anti-neoplastic agent.

72. (New) The pharmaceutical composition of claim 71, wherein said antineoplastic agent is selected from the group consisting of taxol, cyclophosphamide, carboplatinum, cisplatinum, cisplatin, gancyclovir, camptothecin, paclitaxel, hydroxyurea, 5-azacytidine, 5-aza-2'-deoxycytidine, and suramin.

73. (New) The pharmaceutical composition of claim 67, further comprising an anti-inflammatory agent.

74. (New) The pharmaceutical composition of claim 73, wherein said antiinflammatory agent is selected from the group consisting of prednisone, a cox-2 inhibitor, ibuprofen and aspirin.

75. (New) The pharmaceutical composition of claim 67, further comprising an effective amount of Zn2+.

76. (New) A method for inhibiting angiogenesis in a mammal, comprising administering the polypeptide of claim 47 to a mammal in need thereof.

77. (New) An isolated nucleic acid that encodes the polypeptide of claim 47.

78. (New) An expression vector comprising the nucleic acid of claim 77, operatively linked to one or more regulatory sequences that regulate the expression of said nucleic acid in a eukaryotic or prokaryotic host cell.

79. (New) A host cell transformed with the expression vector of claim 78.

80. (New) The host cell of claim 79, selected from the group consisting of mammalian cells, bacteria, yeast, and insect cells.

81. (New) A method for inhibiting angiogenesis in a mammal, comprising administering the nucleic acid of claim 77 to a mammal in need thereof.

82. (New) A method for inhibiting angiogenesis in a mammal, comprising administering the host cell of claim 79 to a mammal in need thereof.

83. (New) A method for inhibiting angiogenesis in a mammal, comprising administering the vector of claim 78 to a mammal in need thereof.